CHAPTER 8. PROGRAM BUDGETS

Introduction

The IRL program has matured beyond its early years of development to become a well-established initiative, respected for its scientifically based mission and vision for the restoration of the IRL system. One aspect of the IRL program that has developed significantly in recent years is the federal participation; particularly by the U.S. Army Corps of Engineers (USACE) through its partnership with the SFWMD and SJRWMD in the IRL South and North feasibility studies. These feasibility studies, and the resultant construction plans and designs, will require hundreds of millions of federal dollars to build many of the major regional projects, watershed BMPs, and other IRL aquatic and wetland restoration projects in the IRL basin. This new phase of work is reflected in the projected 5-year budgets of SJRWMD and SFWMD (please refer to **The Next 5 Years** below). These budgets also reflect the continuation of monitoring and research as part of the ongoing pursuit to further our understanding of the IRL system, to develop better restoration policies, priorities and strategies, and, in general, improve management of this estuary.

However, budgets do not simply reflect the programmatic policies, priorities, and strategies; rather, budgets – especially funding or spending constraints -- can often shape them. This is the case with the IRL programs. A brief description of the budgetary history of the IRL programs, included below, may help the reader gain greater appreciation of that fact, and should help explain the fiscal factors that led to both the present and projected budgets of SJRWMD, SFWMD, and their multi-agency partnerships.

The Early Years (1988 – 1995)

During the initial years of SWIM, 1988 through 1991, the state's SWIM Trust Fund and the ad valorem funds of SJRWMD and SFWMD constituted nearly the total financial support for the programs. At that time, the SWIM Trust Fund provided up to 80% of the cost and the Districts provided at least 20% (a few hundred thousand dollars each per year). This cost-share funding supported program planning and the initiation of projects, many being multi-year and Lagoon-wide in scope and primarily diagnostic in purpose.

By 1992, the cost-share was legislatively revised to 60% funding from the state and 40% from the Districts. However, the Districts typically contributed more than 50% of the total annual budget each year from 1992 through 1995. If it was the state legislature's intent to provide time-limited, seed-money support to SWIM, it certainly followed through on that intent by 1995. By that year, and the years to follow, the Districts could no longer rely on the stability or continuance of any state trust funds. Instead, District funding increased even further to keep pace with programmatic demands. The Districts' individual, annual contributions of a few hundred thousand dollars in 1987/88 increased to several millions of dollars by 1995. Even though the Districts were willing at that time to shoulder much of the programmatic costs, it was realized that such a high level of support could not continue indefinitely; outside funding at a substantial level was needed to ensure long-term success.

The Recent Years (1996 – 2001)

By 1996, outside funding was beginning to play a significant supporting role. The Districts' efforts to attract outside funding coupled with the emergence of federal funding programs were having a major effect. Programmatic costs could now be largely divided among several funding sources, and the Districts' ad valorem contribution, percentage-wise, decreased as the annual budgets increased.

The EPA's budget for the IRLNEP and the IRL license plate revenues could now be considered stable sources of funds, approximately $300,000 to $500,000 per year. Additionally, other federal, state, regional, and local agency funding sources were tapped to the extent possible to support the various and ongoing monitoring, diagnostic, and restoration projects.

Local governments especially have given significantly toward the overall effort. Their contributions are typically demonstrated in the large amount of labor and equipment expended each year assisting the Districts in water quality and seagrass monitoring, reconnection of mosquito control impoundments, construction and maintenance of urban stormwater BMPs, and in other projects. Participation by cities, counties, and water control districts will grow as they work to meet their responsibilities for fulfilling NPDES permit requirements and achieving PLRGs or TMDLs.

Since 1997/98, the Districts and local government partners have been fortunate in receiving rather large cost-share and grant awards for diagnostic research and restoration. Various federal program monies – well over $10 million thus far -- have bolstered research and monitoring (e.g., U.S. EPA – Wetlands Management Research Initiative, NASA support in developing high-tech monitoring methods and IRL databases) as well as watershed planning, developing PLRGs, and implementing non-point source controls (e.g., USACE/SFWMD IRL-South Feasibility Study and U.S. EPA 319 Non-Point Source Program). In 1997-1999, the Florida Inland Navigation District contributed over $1.1 million toward muck removal from Crane and Turkey creeks.

From 1999 through 2001, state funding re-emerged in a substantial way. Florida Forever program funds and special state appropriations, generally funneled through either the Water Management Lands or Ecosystem Management trust funds, were earmarked for major muck removal, surface water management projects, and wetland restoration (e.g., Sebastian River muck removal: $4.4 million; Indian River Farms WCD surface water management: ~$4.3 million; impounded wetland reconnections: ~$250,000). During the same time period, the state legislature appropriated $21.5 million to the St. Lucie River Issues Team to support various projects, which was slightly overmatched by local, state and federal funds (>$21.5 million). This recent outlay of millions of state dollars is expected to be short-lived; nonetheless, it provided a timely boost to a number of major projects.

The Next 5 Years (2002 – 2007)

As was previously mentioned, IRL restoration has entered into a phase of design and construction work. The next 5 years will be marked by a major federal presence consisting primarily of the USACE, U.S. EPA, U.S. Fish and Wildlife Service, the National Park Service, and NASA. The next 5 years will also be marked by increased local government involvement in watershed plans, PLRGs, and related surface water management projects. Even though more effort will be spent on design and construction, the Districts will maintain the same level of effort on monitoring and research as in recent years.

The projected budgets are tabulated below. The first series of budget tables (Tables 8-1a through 8-1f) show SJRWMD and SFWMD cost estimates for the major projects broken out Lagoon-wide and by sub-lagoon region. The SJRWMD and SFWMD costs include ad valorem revenue, state legislative appropriations directed to the Districts, license plate funds, and EPA/IRLNEP funds. The second budget table (Table 8-2) shows the projected budgets of other large, complementary programs; for example, USACE's costs for conducting the IRL-North Feasibility Study and implementing the recommendations of the IRL-South Feasibility Study Report. Other complementary programs that are included in Table 8-2 are the *Blueway* land acquisition (land purchase costs only) and the St. Lucie River Issues Team.

It's important to keep in mind, when reviewing the tables of projected budgets, that the dollar estimates are just that – estimates. The budgets reflect an approximation of costs and schedule based on past experiences with the work and on "good-faith" outside funding projections provided by other agencies. Funding sources at any governmental level are affected, positively or negatively, by priority shifts or rates of revenue generation. To date, both of those factors have favored the Indian River Lagoon. We are hopeful that this positive trend will continue.

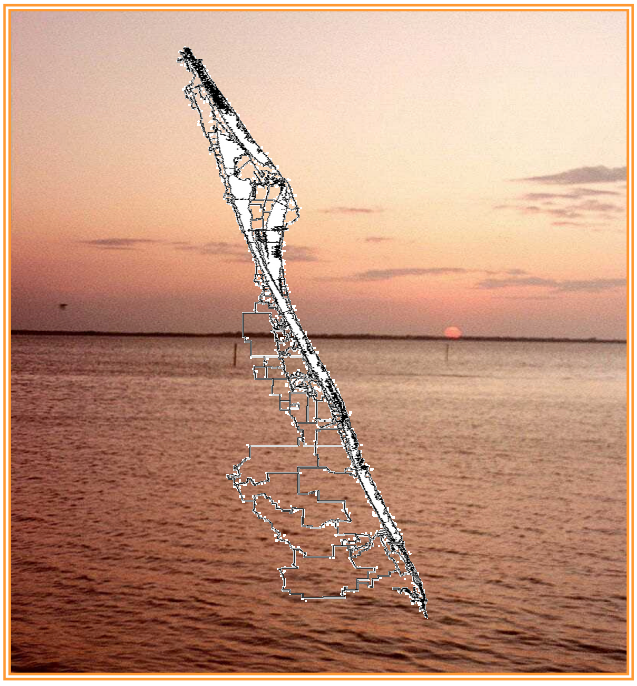

Table 8-1a. Lagoon-wide Budget *Monitoring, Research, PLRG development, Planning, Education, Administration*	**SJRWMD (SJ) and SFWMD (SF) Budget Estimates** ***Includes ad valorem, IRLNEP (EPA), license plate, and state-appropriated funds directed to the Districts*** **Fiscal Year**					
	FY 02	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**FY 07**
Seagrass & Water Quality						
Seagrass photography & mapping*	SJ: $159,000 SF: $ 68,745	SJ: $ 82,750 SF: $104,780	SJ: $155,500 SF: $ 77,000	SJ: $ 72,750 SF: $130,000	SJ: $155,500 SF $ 81,500	SJ: $ 72,750 SF: $129,750
Seagrass field monitoring*	SJ: $94,000 SF: $74,869	SJ: $ 94,000 SF: $132,497	SJ: $ 94,000 SF: $128,250	SJ: $ 94,000 SF: $122,750	SJ: $ 94,000 SF: $127,000	SJ: $ 94,000 SF: $128,000
Ambient water quality monitoring*	SJ: $266,000 SF: $236,008	SJ: $248,500 SF: $360,443	SJ: $248,500 SF: $358,500	SJ: $248,500 SF: $358,500	SJ: $248,500 SF: $310,000	SJ: $248,500 SF: $290,000
Assessment of new methods to monitor resources & manage data	SJ: $425,000 SF: $224,384	SJ: $485,000 SF: $161,504	SJ: $405,000 SF: $150,000	SJ: $260,500 SF: $150,000	SJ: $160,500 SF: $150,000	SJ: $160,500 SF: $150,000
Drift macroalgae monitoring*	SJ: $106,500 SF: $0	SJ: $16,500 SF: $35,257	SJ: $163,750 SF: $40,000	SJ: $23,750 SF: $40,000	SJ: $163,750 SF: $40,000	SJ: $23,750 SF: $40,000
Investigation of factors limiting sea-grass (light, salinity, hydrodynamics, etc.)	SJ: $103,000 SF: $ 43,345	SJ: $213,750 SF: $ 36,351	SJ: $171,500 SF: $ 48,000	SJ: $318,750 SF: $ 50,500	SJ: $131,500 SF: $ 52,000	SJ: $79,750 SF: $40,000
Quantification of boundary conditions for IRL modeling*	SJ: $263,750 SF: $219,579	SJ: $483,750 SF: $204,266	SJ: $377,500 SF: $210,500	SJ: $277,500 SF: $220,000	SJ: $277,500 SF: $200,000	SJ: $227,500 SF: $200,000
General development of models*	SJ: $180,000 SF: $ 31,579	SJ: $440,000 SF: $ 33,162	SJ: $77,000 SF: $35,000	SJ: $60,500 SF: $38,000	SJ: $27,500 SF: $38,000	SJ: $27,500 SF: $39,500
PLRG/TMDL development	SJ: $5,000 SF: $63,158	SJ: $ 5,500 SF: $67,224	SJ: $ 5,000 SF: $78,000	SJ: $ 5,500 SF: $89,500	SJ: $ 5,000 SF: $92,000	SJ: $ 5,000 SF: $82,750
Muck and toxic substances survey	SJ: $0 SF: $10,800	SJ: $0 SF: $0	SJ: $11,000 SF: $0	SJ: $116,500 SF: $0	SJ: $55,500 SF: $0	SJ: $2,750 SF: $0
Inventory of domestic WWTPs	SJ: $2,750	SJ: $0	SJ: $0	SJ: $0	SJ: $5,500	SJ: $0
Staff effort to acquire land for stormwater projects*	SJ: $22,000 SF: $0	SJ: $16,500 SF: $0	SJ: $5,500 SF: $0	SJ: $11,000 SF: $0	SJ: $5,500 SF: $0	SJ: $5,500 SF: $0
Land purchase costs for stormwater projects*	SJ: $2M SF: $0**	SJ: $1M SF: $0	SJ: $0 SF: $0	SJ: $2M SF: $0	SJ: $0 SF: $0	SJ: $2M SF: $0
TOTALS *rounded to nearest $1,000*	***SJ: $ 3.627M*** ***SF: $ 972,000***	***SJ: $3.086M*** ***SF: $1.135M***	***SJ: $1.714M*** ***SF: $1.125M***	***SJ: $3.489M*** ***SF: $1.199M***	***SJ: $1.330M*** ***SF: $1.090M***	***SJ: $2.947M*** ***SF: $1.073M***
Coastal Wetlands						
Wetland component of IRL-N. Feasibility Study (USACE/SJRWMD)*	SJ: $2,750	SJ: $2,750	SJ: $2,750	SJ: $2,750	SJ: $2,750	SJ: $2,750
Blueway land acquisition program (staff costs only; estimated land costs in Table 8-2)	SJ: $11,000	SJ: $16,500	SJ: $27,500	SJ: $22,000	SJ: $27,500	SJ: $33,000
Wetland rehabilitation and management	SJ: $8,250 SF: $5,000	SJ: $8,250 SF: $6,000	SJ: $5,500 SF: $5,750	SJ: $5,500 SF: $5,500	SJ: 8,250 SF: $5,500	SJ: 8,250 SF: $4,850
Wetlands Management Research Initiative***	SJ: $1,650	SJ: $1,650	SJ: $8,250	SJ: $8,250	SJ: $5,500	SJ: $5,500
TOTALS *rounded to nearest $1,000*	***SJ: $24,000*** ***SF: $ 5,000***	***SJ: $29,000*** ***SF: $ 6,000***	***SJ: $44,000*** ***SF: $ 6,000***	***SJ: $38,000*** ***SF: $ 6,000***	***SJ: $44,000*** ***SF: $ 6,000***	***SJ: $50,000*** ***SF: $ 5,000***
Public Involvement & Education						
Public Presentations & Seminars*	SJ: $84,500 SF: $19,500	SJ: $84,100 SF: $21,000	SJ: $85,500 SF: $35,000	SJ: $85,500 SF: $22,500	SJ: $85,500 SF: $22,500	SJ: $85,500 SF: $35,000
Citizens WQ monitoring network	SJ: $68,250	SJ: $71,000	SJ: $68,250	SJ: $68,250	SJ: $71,000	SJ: $71,000
Informational materials and campaigns, license plate promotion	SJ: $167,500 SF: $ 6,500	SJ: $425,500 SF: $ 9,500	SJ: $260,500 SF: $ 6,500	SJ: $260,500 SF: $ 6,500	SJ: $260,500 SF: $ 6,500	SJ: $260,500 SF: $ 6,500
TOTALS *rounded to nearest $1,000*	***SJ: $320,000*** ***SF: $ 26,000***	***SJ: $580,000*** ***SF: $ 30,000***	***SJ: $414,000*** ***SF: $ 42,000***	***SJ: $414,000*** ***SF: $ 29,000***	***SJ: $417,000*** ***SF: $ 29,000***	***SJ: $417,000*** ***SF: $ 42,000***
WMD/IRLNEP *						
Planning & Administration	*SJ: $165,000* *SF: $ 92,494*	*SJ: $165,000* *SF: $ 23,216*	*SJ: $165,000* *SF: $ 50,000*	*SJ: $165,000* *SF: $ 99,750*	*SJ: $165,000* *SF: $ 42,000*	*SJ: $165,000* *SF: $ 32,000*
GRAND TOTALS *rounded to nearest $1,000*	***SJ: $4.136M*** ***SF: $1.095M***	***SJ: $3.860M*** ***SF $1.196M***	***SJ: $2.337M*** ***SF $1.222M***	***SJ: $4.106M*** ***SF $1.334M***	***SJ: $1.956M*** ***SF $1.167M***	***SJ: $3.579M*** ***SF $1.152M***

* SJ costs also included in the IRL-North Feasibility Study (USACE/SJRWMD).

** Estimated costs to be determined and shown in the South IRL or St. Lucie River budget tables (Tables 8-1e and f)

*** $550,000 in EPA funds were encumbered in previous fiscal years to cover contractual work in this 3.5-year study, which culminates in FY03

Table 8-1b. ***Mosquito Lagoon Budget*** *Research, Non-point source controls, watershed and coastal wetland plans and projects*	**SJRWMD Contractual and Staff Estimates** *Includes ad valorem, IRLNEP (EPA), license plate, and state-appropriated funds directed to the Districts*					
	Fiscal Year					
	FY 02	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**FY 07**
Seagrass & Water Quality	**These projects are applied Lagoon-wide, including Mosquito Lagoon, and the estimated costs are found in the Lagoon-wide Budget (Table 8-1a)**					
Seagrass photography & mapping						
Seagrass field monitoring						
Ambient water quality monitoring						
Quantification of inputs/boundary conditions for IRL modeling						
Drift macroalgae monitoring						
Assessment of new methods to monitor and manage data						
Investigation of factors limiting seagrass growth (light, salinity, hydrodynamics, etc.)						
Muck and toxic substances survey						
Inventory of domestic WWTPs						
Application of watershed & IRL models	$ 2,750	$ 2,750	$ 27,500	$ 8,250	$0	$0
PLRG/TMDL development & coordination	$ 1,100	$ 2,750	$ 5,500	$ 2,750	$0	$0
Turbidity Investigation in Mosquito Lagoon	--	$122,000	$ 66,500	$ 2,750	$0	$0
Non-point (stormwater) control projects	$182,550	$150,550	$151,100	$251,100	$251,100	$151,100
TOTALS rounded to nearest $1,000	***$186,000***	***$278,000***	***$251,000***	***$265,000***	***$251,000***	***$151,000***
Coastal Wetlands						
Conduct wetland component of IRL-North Feasibility Study (USACE/SJRWMD)*	$ 1,100	$ 2,750	$ 5,500	$ 2,750	$ 2,750	$ 2,750
Wetland rehabilitation and management	$ 52,750	$ 1,100	$ 51,100	$ 1,100	$ 51,100	$ 1,100
Rehabilitation of draglined marshes*	$155,500	$155,500	$205,500	$208,250	$308,250	$308,250
TOTALS rounded to nearest $1,000	***$209,000***	***$159,000***	***$262,000***	***$212,100***	***$362,000***	***$312,000***

*Also included in the IRL-North Feasibilty Study (USACE & SJRWMD)

Wetland/shoreline restoration work in Canaveral National Seashore, Mosquito Lagoon

Water Quality Monitoring: top -- taking subsurface light measurements; bottom, l to r -- collecting and lab-processing chlorophyll samples